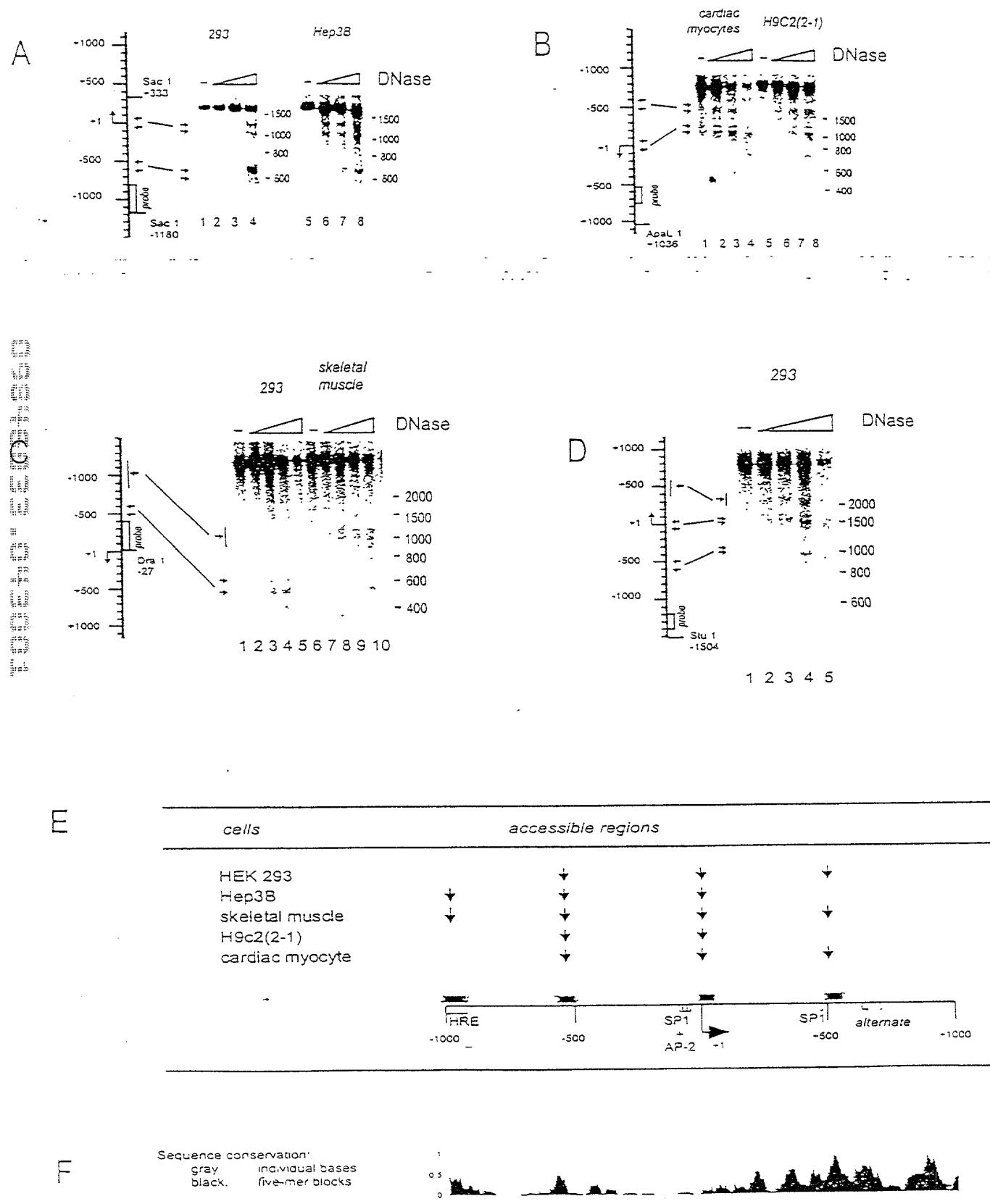
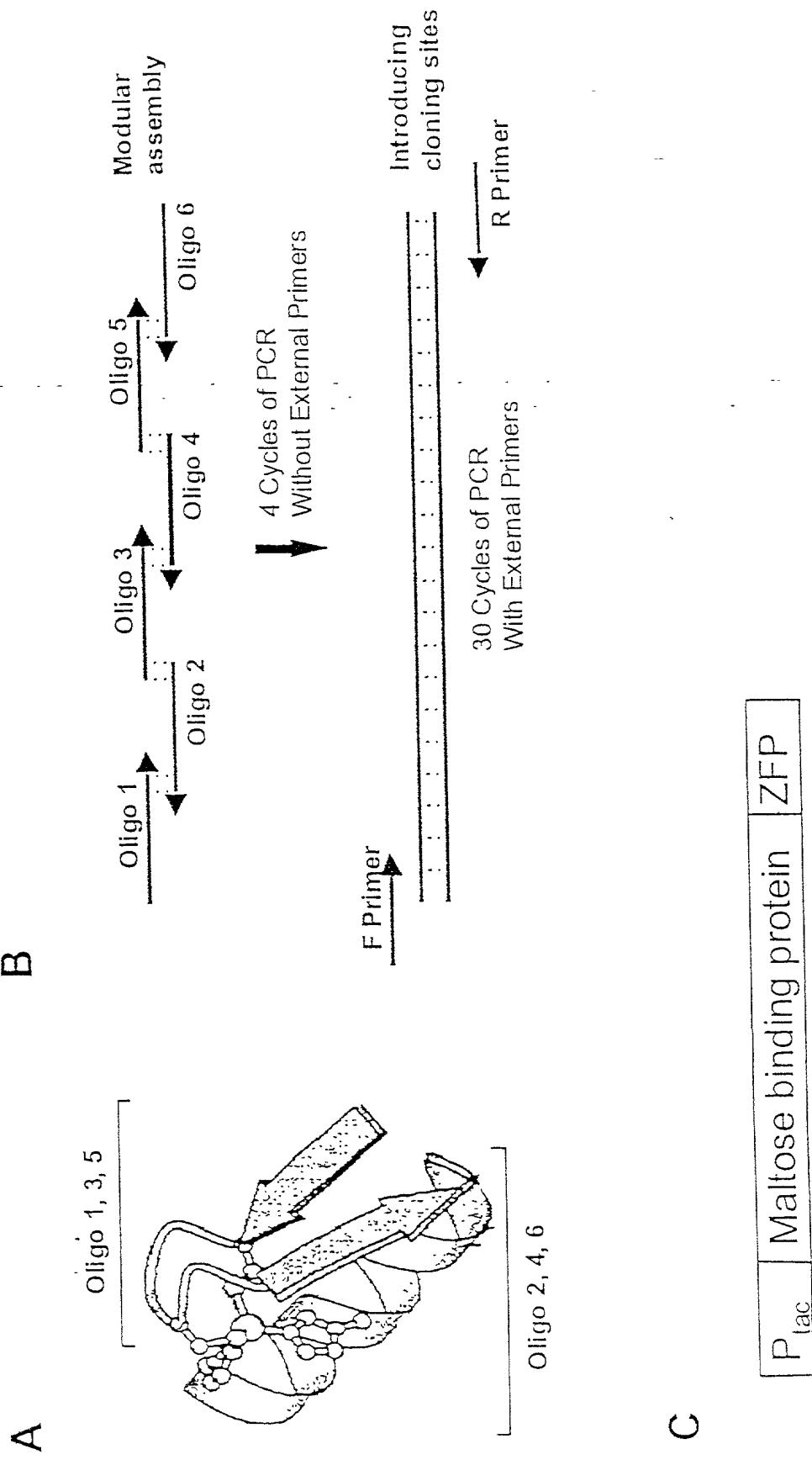


Figure 1



**Figure 2**



# Figure 2

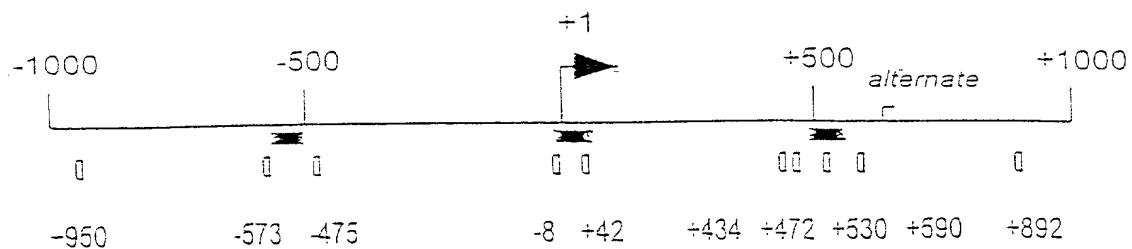
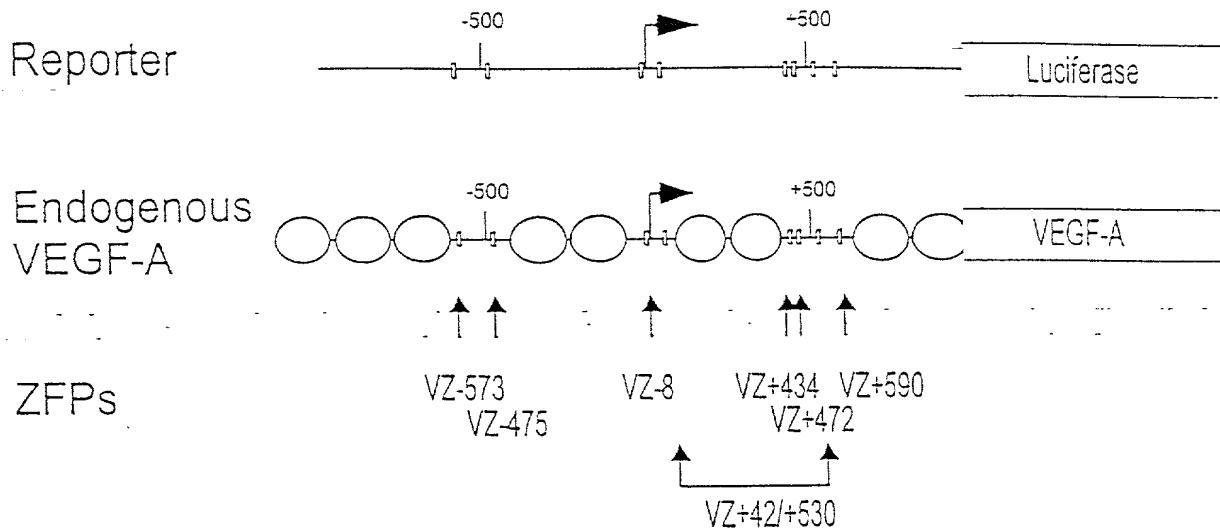


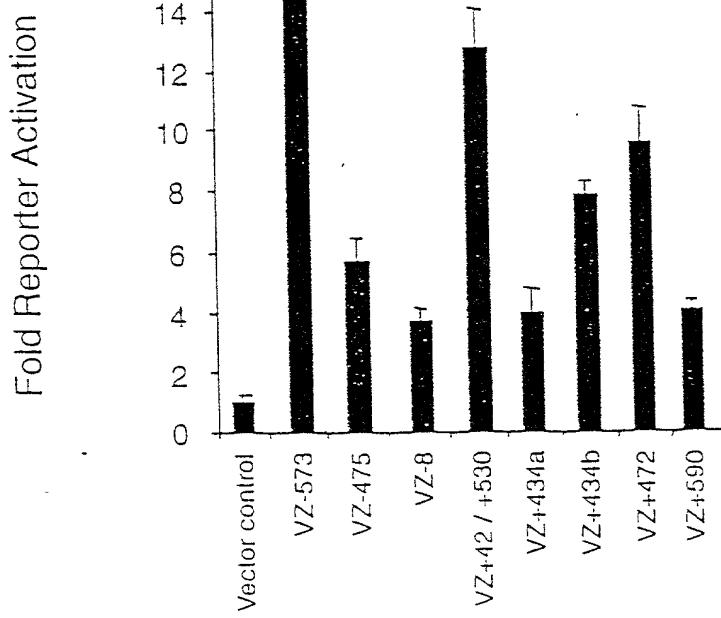
Figure 3

A

## Reporter



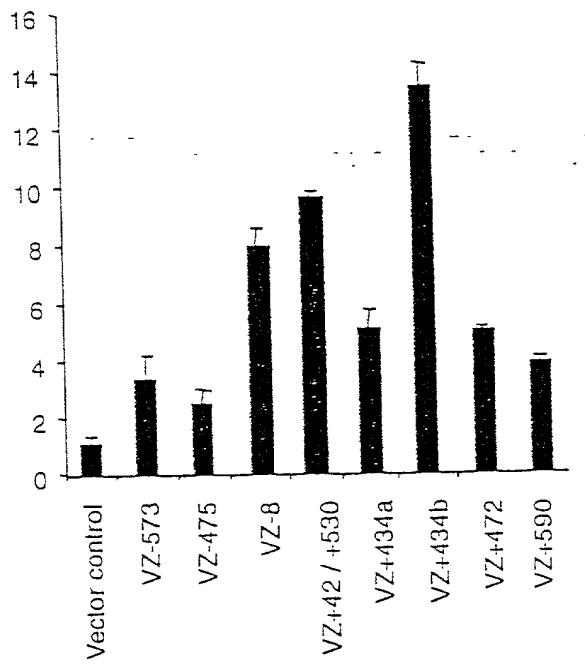
B



**Figure 3**

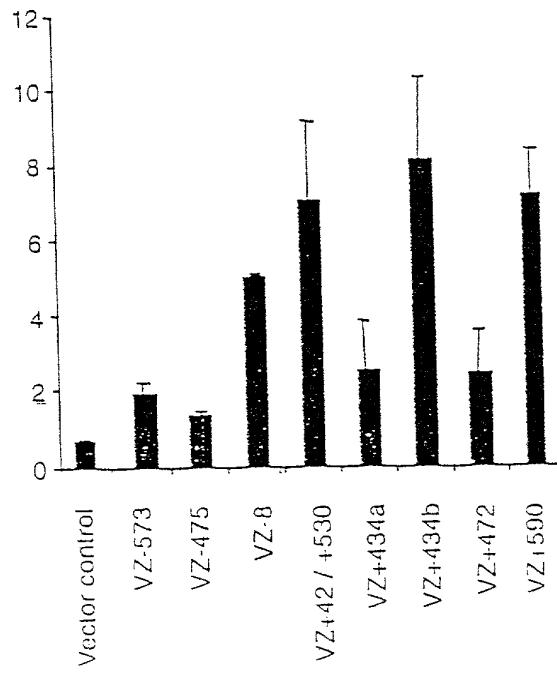
**C**

VEGF-A Protein Production  
Fold Activation

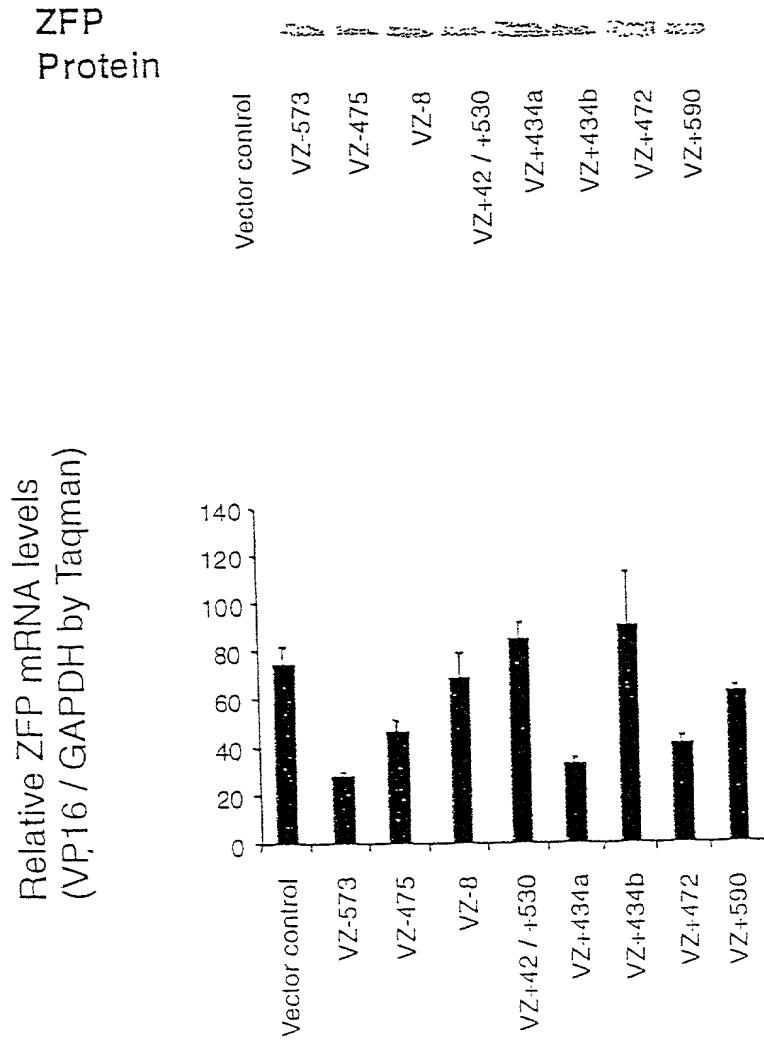


**D**

VEGF-A mRNA Activation  
(VEGF-A/GAPDH ratio)



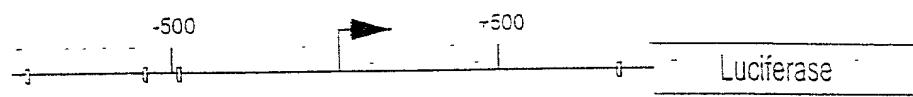
**Figure 3**



**Figure 4**

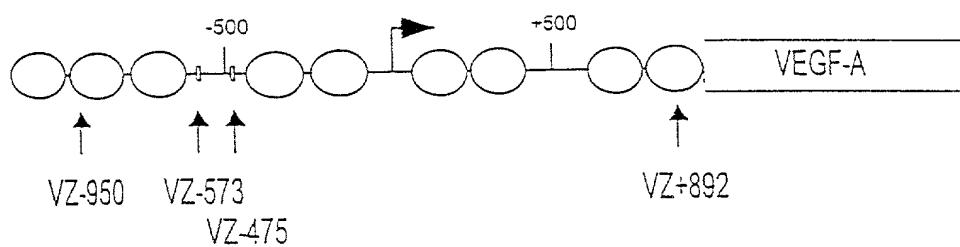
**A**

Reporter



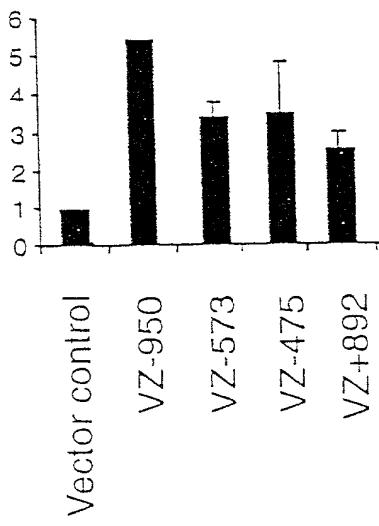
Endogenous  
VEGF-A

ZFPs



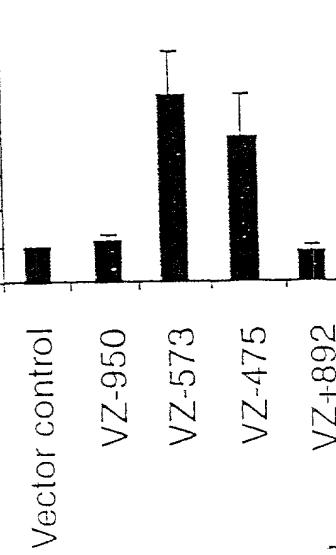
**B**

Fold Reporter Activation

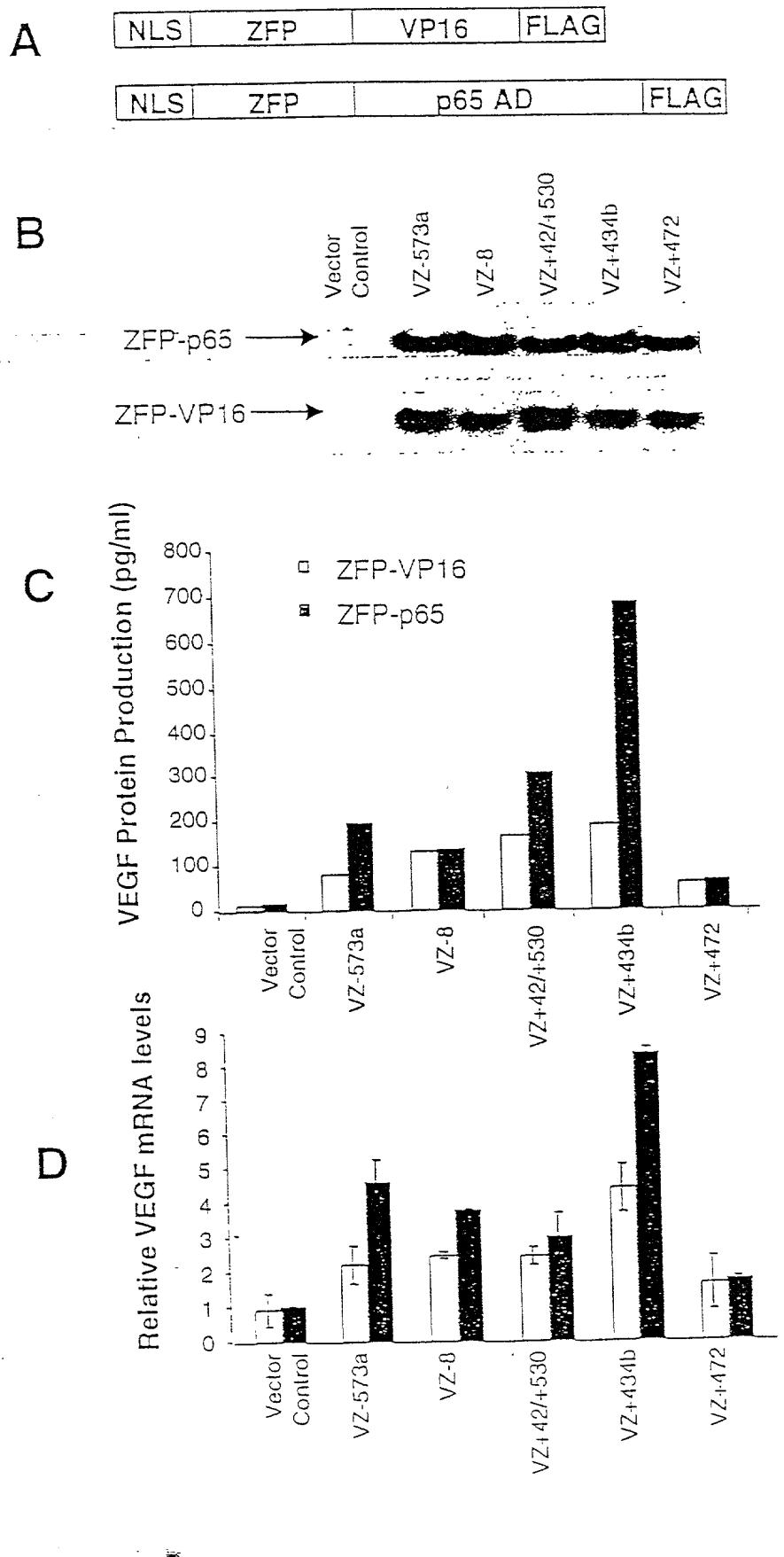


**C**

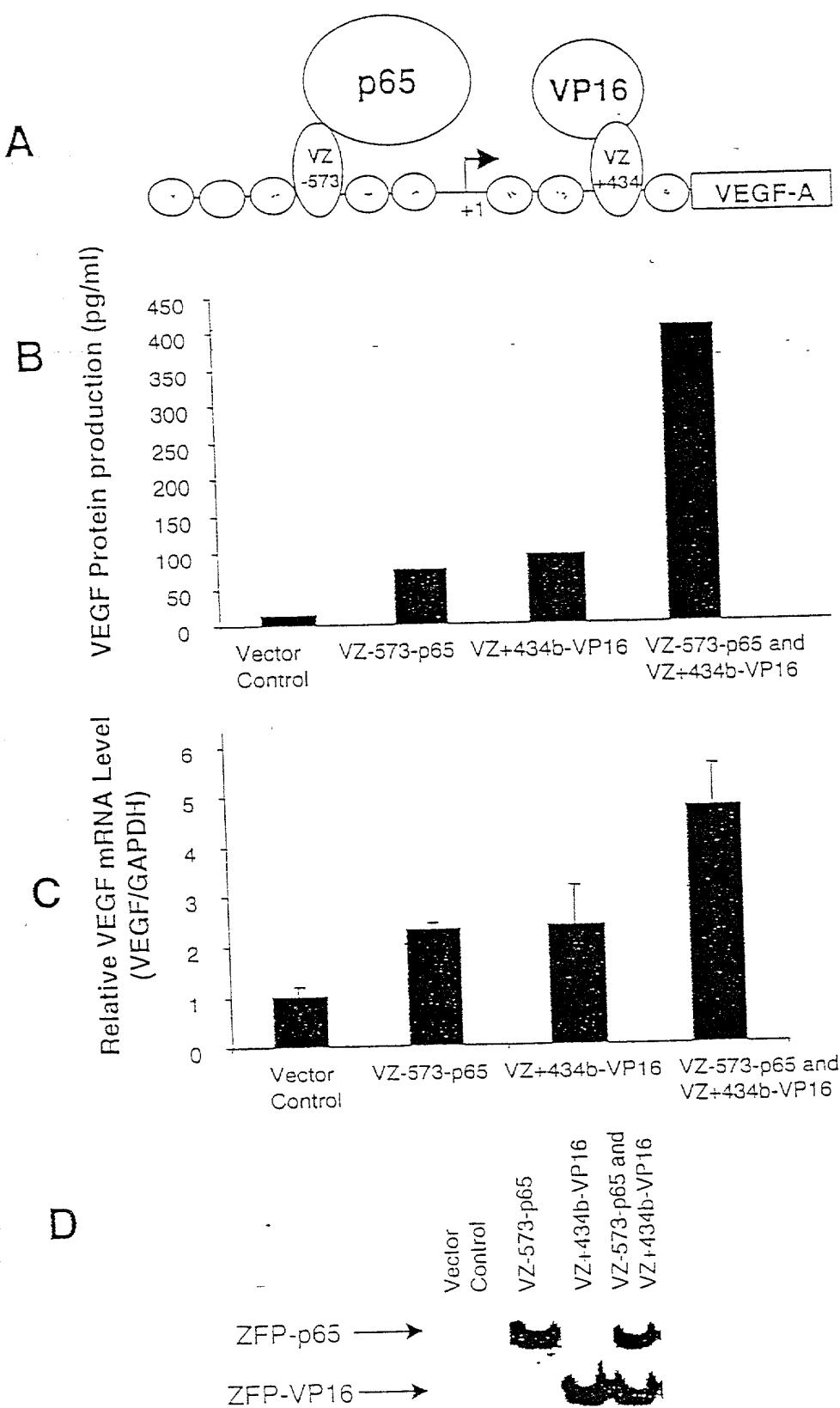
Endogenous VEGF-A  
protein fold activation



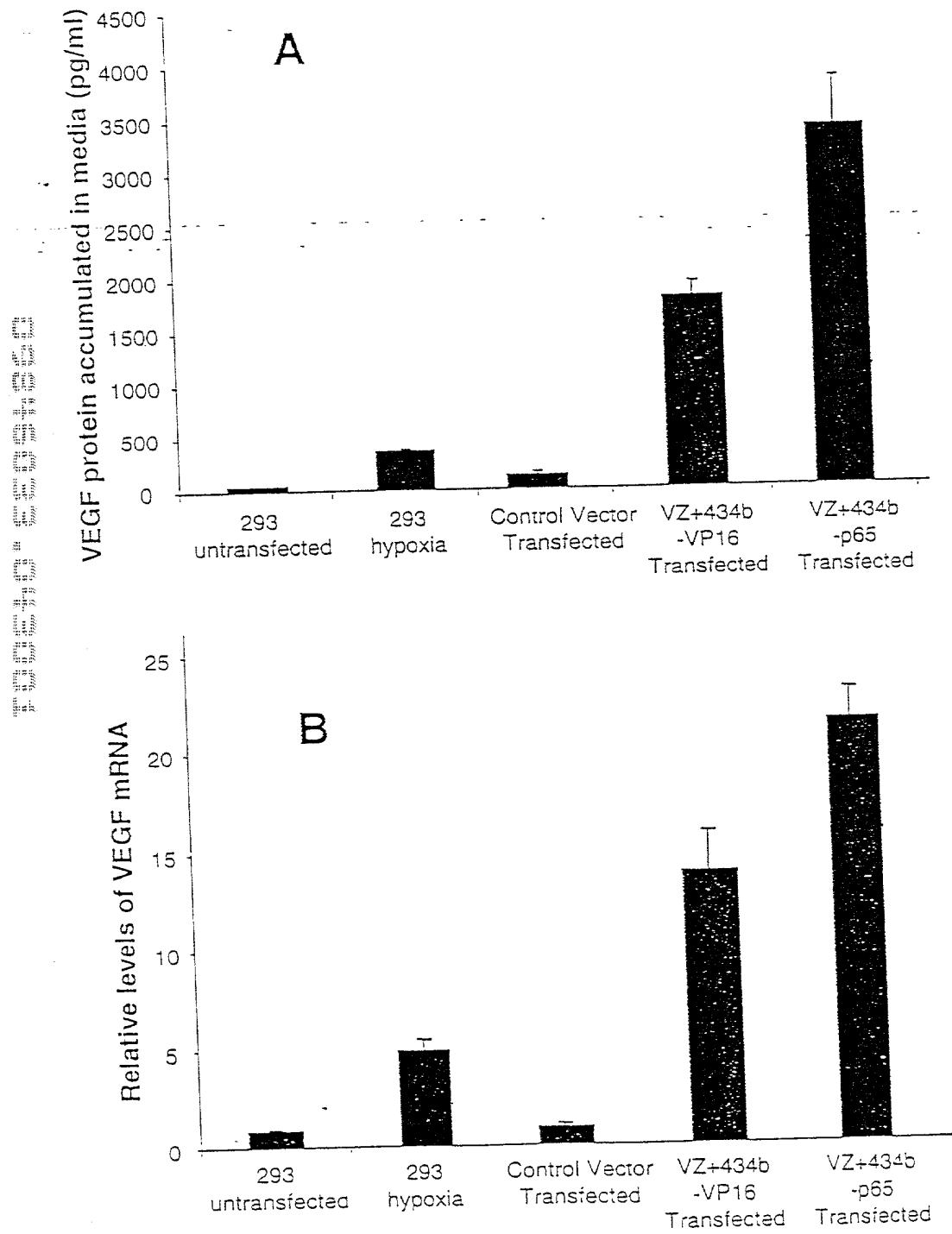
# Figure 5



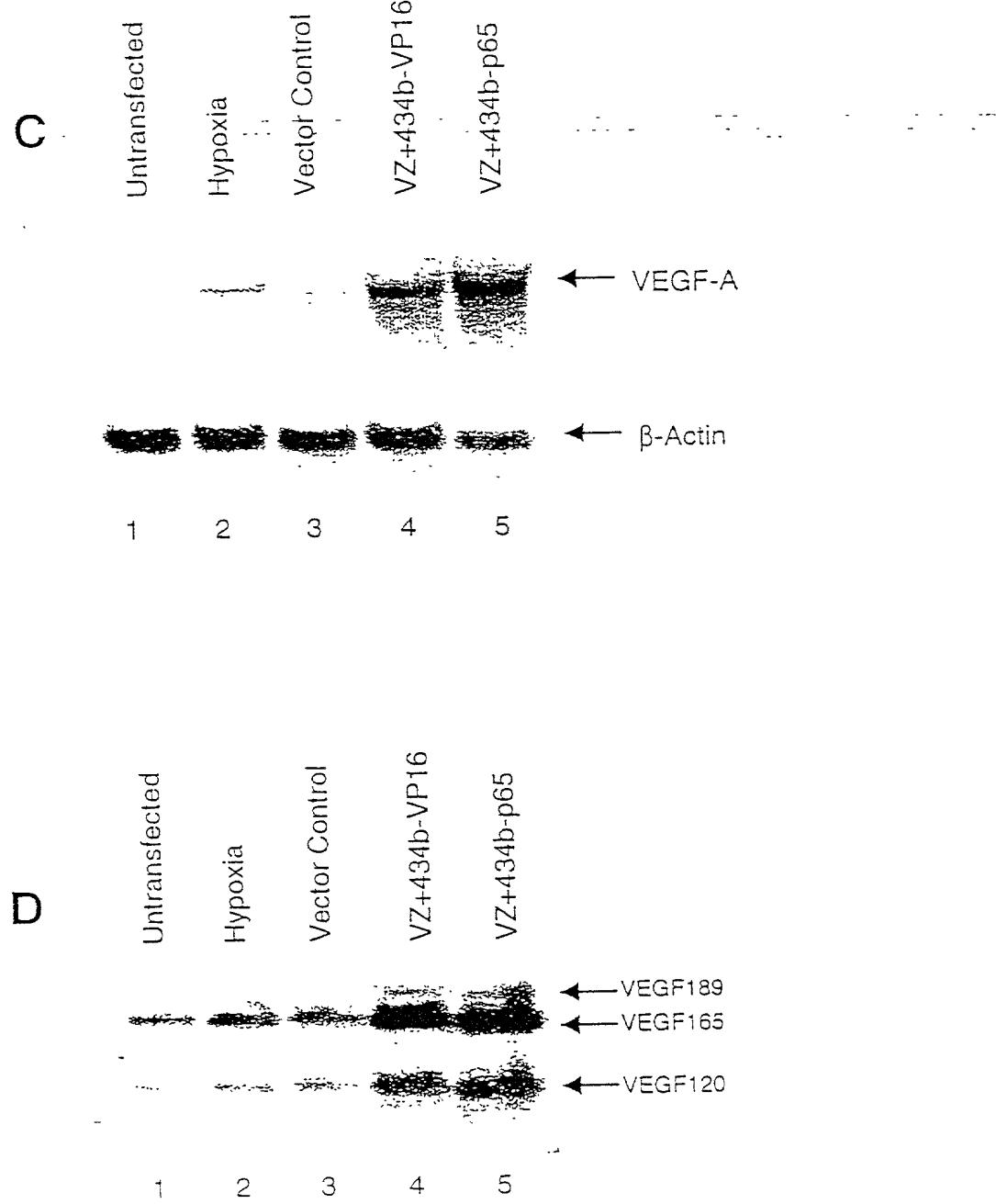
# Figure 6



**Figure 7**



**Figure 7**



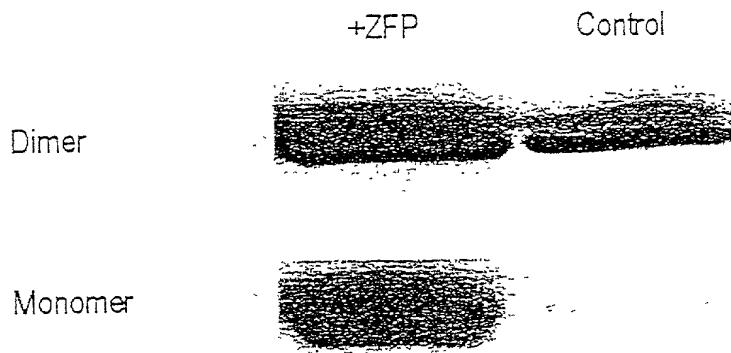


FIG. 8

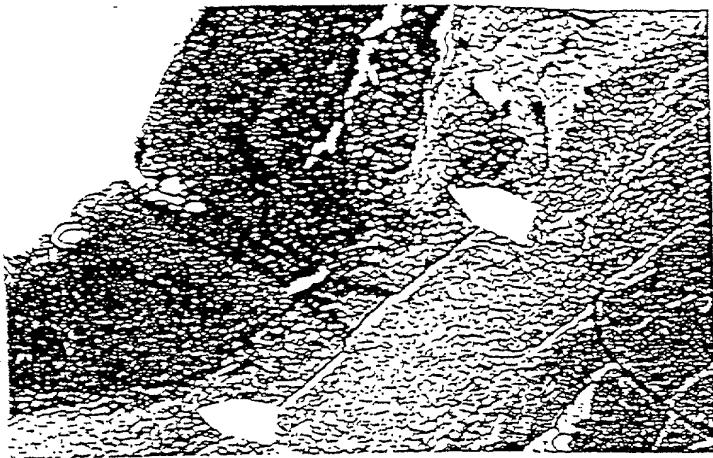
Control

$\div ZFP$

A.



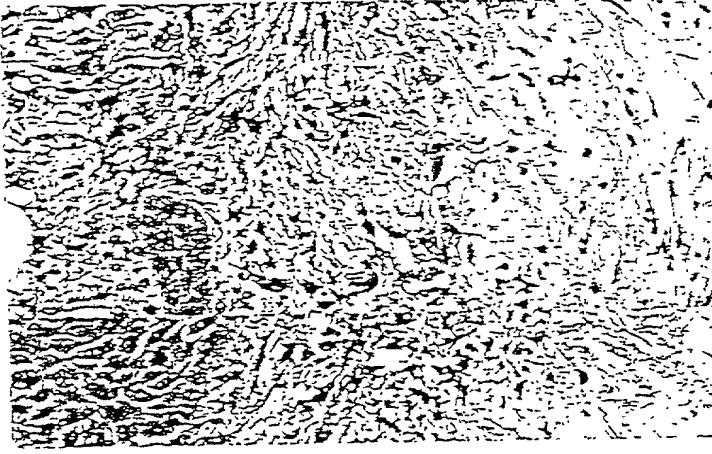
B.



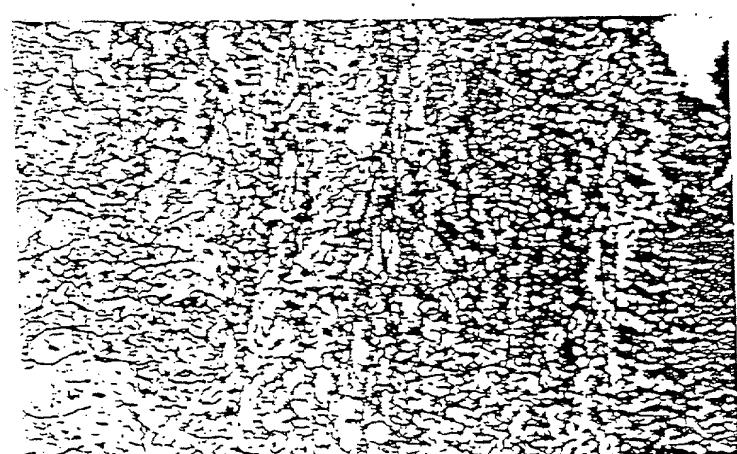
C.



D.



E.



F.

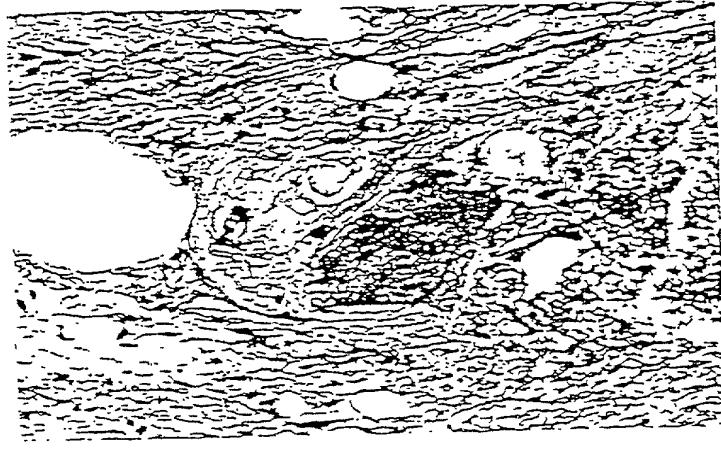
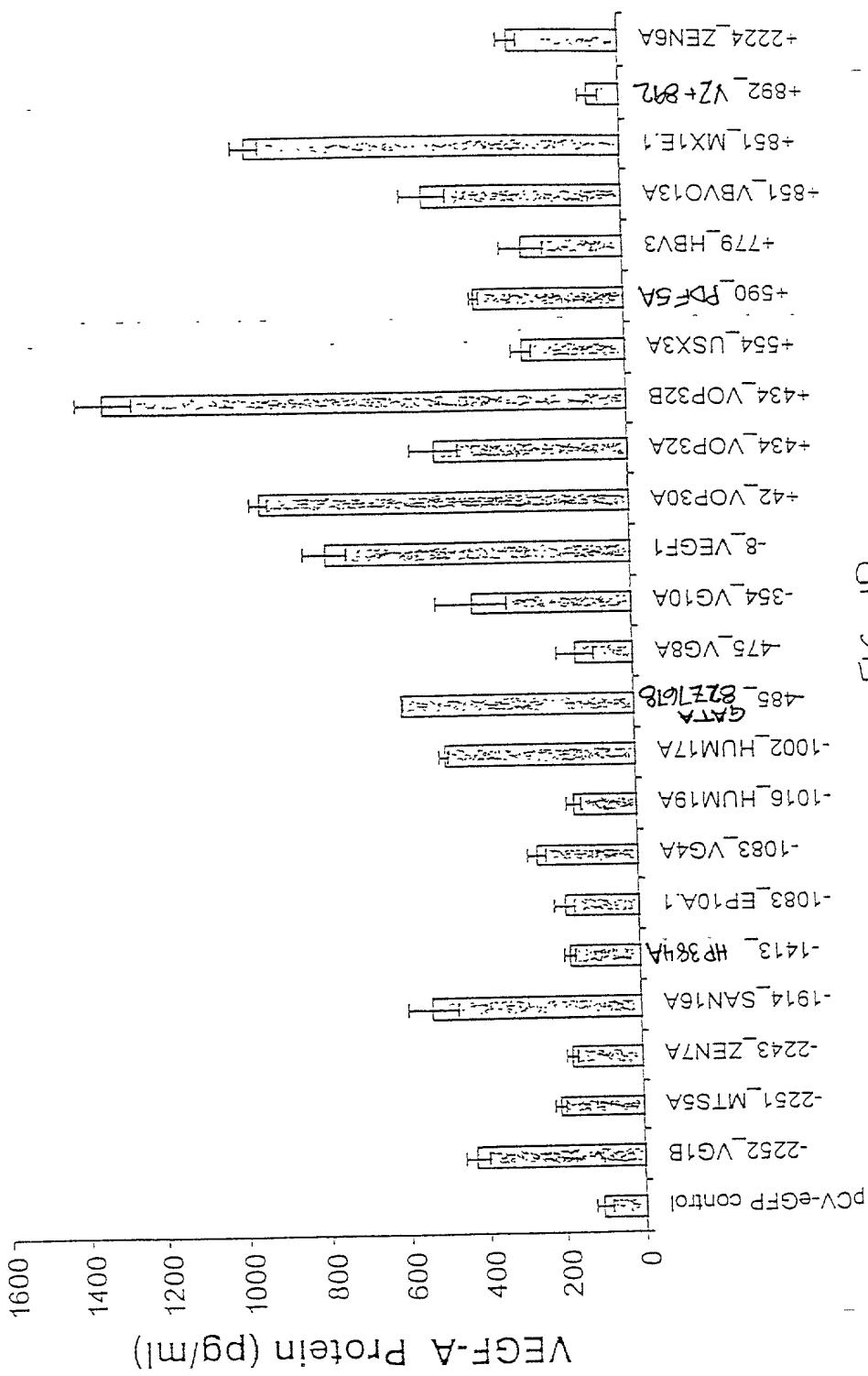


FIG. 9

Fig. 10



## Activation of Human VEGF-A Gene By ZFPs in 293 Cells (VEGF-A protein production detected by ELISA)

# Activation of Human VEGF-A Gene by ZFPs (VEGF-A mRNA Detected by Taqman Analysis)

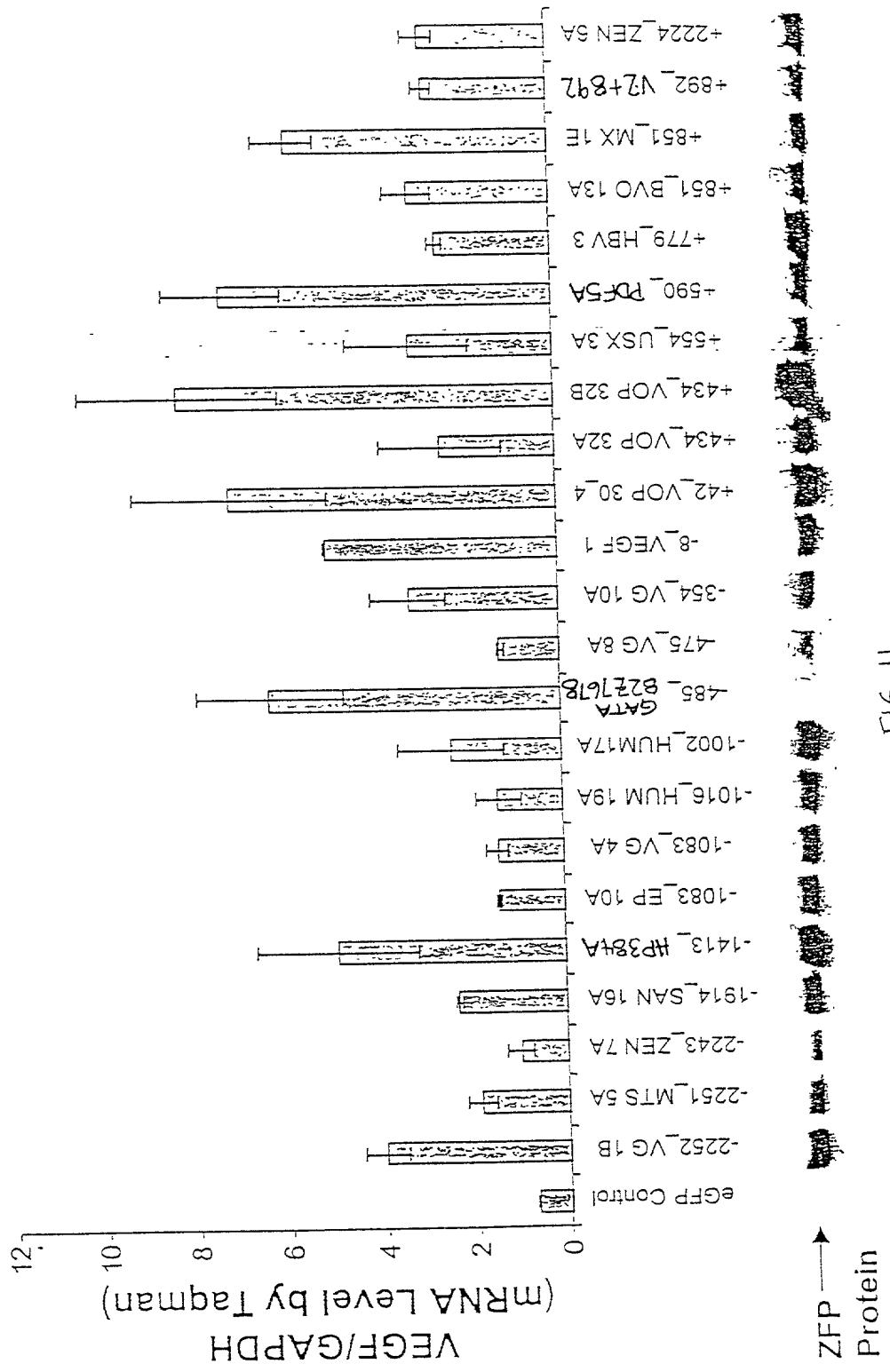


Fig. 11

# Activation of Human VEGF-A Gene Promoter by ZFPs

## (Activation of VEGF Reporter in 293 cells)

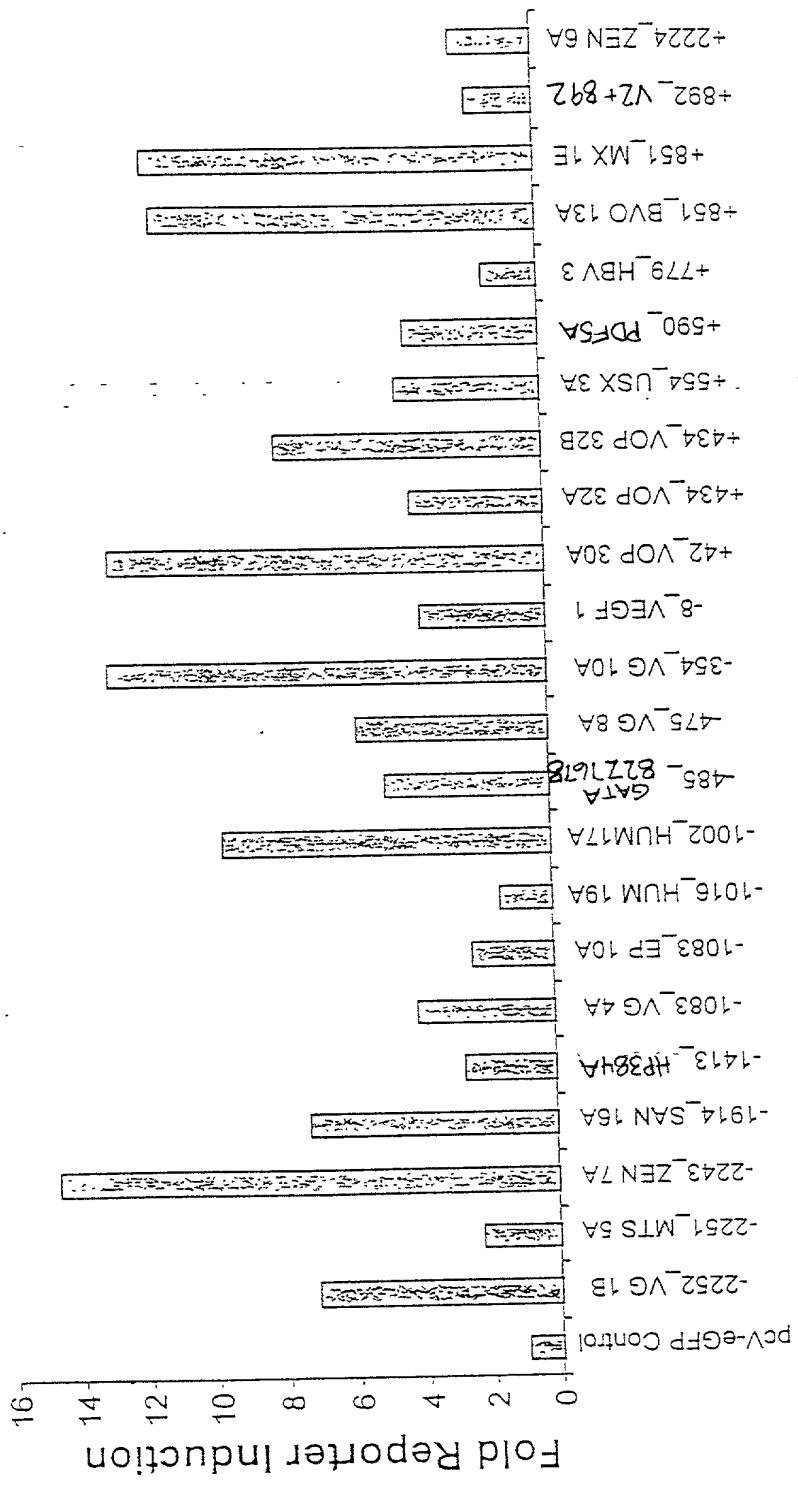


Fig. 12

VEGF Activation By ZFP VOP28A and RAT24A in 293 Cells  
(VEGF protein detected by ELISA)

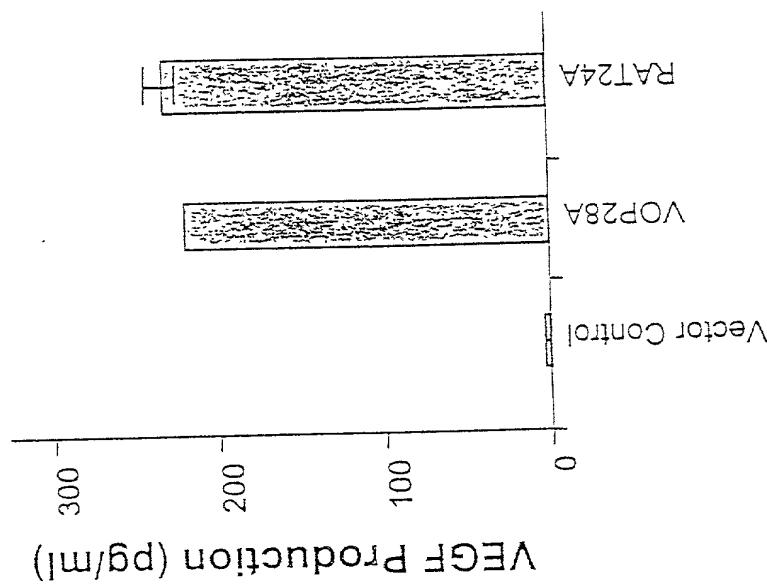
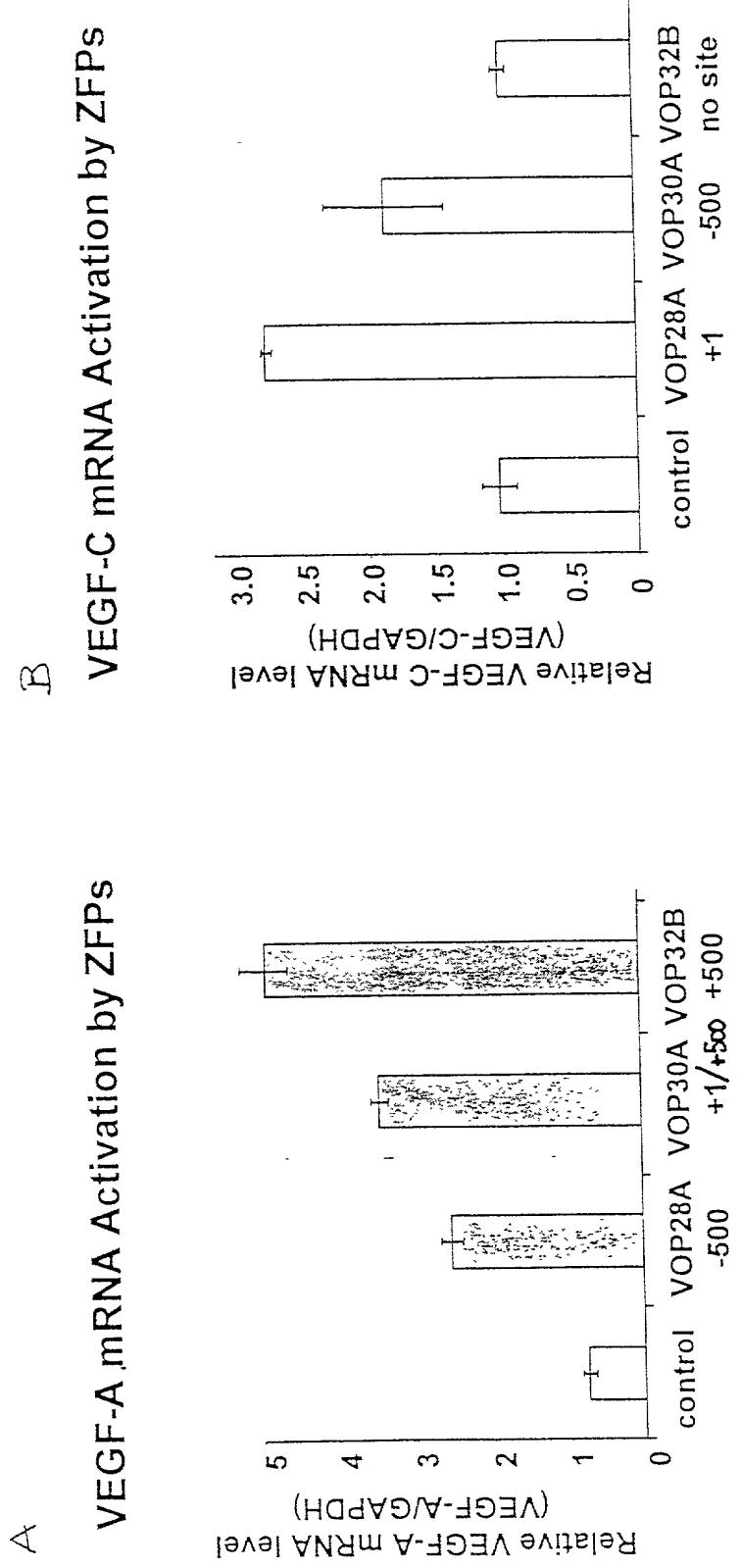
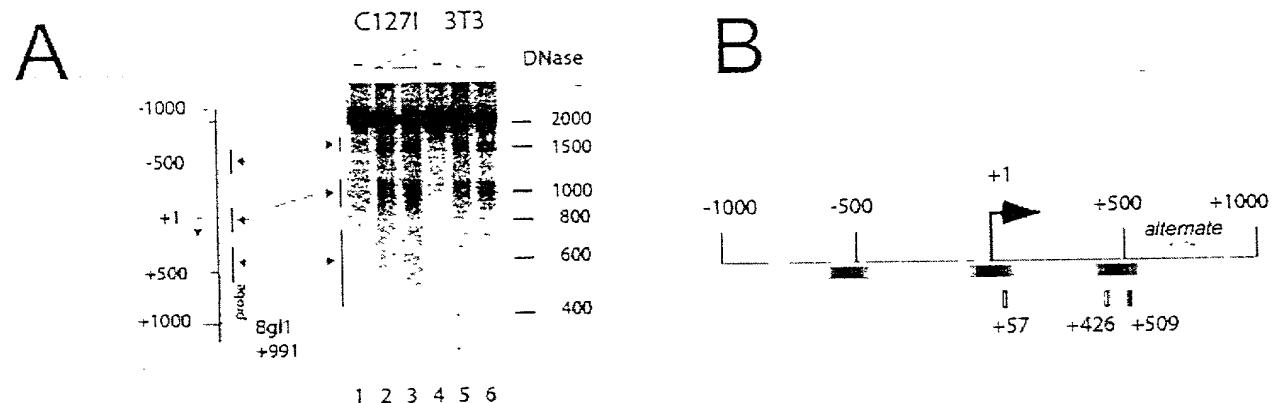


Fig. 13

**Figure 14**



# Figure 15



probe BglI +991

**C**

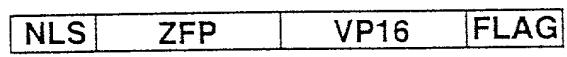
ZFP Name	Target Sequence 5' - 3'	Subsites 5' - 3'	Finger Designs
mVZ+57	TGAGCGGGGGCAGCGGAGc	TCAg GCGg GCGg GCAg GCGg GAGg	QSGHLTK F6 RSDELSR F5 RSDELTR F4 QSGSLTR F3 RSDELQR F2 RSNLNLR F1
mVZ+426	GGGGGTGACc	GGGg GGGg GACc	RSDHLSR F3 TSGHLVR F2 DRSNLTR F1
mVZ+509	GCTGGGGGCg	GCTg GGGg GGCg	QSSDLTR F3 FSDHLTR F2 DRSHLTR F1

**D**

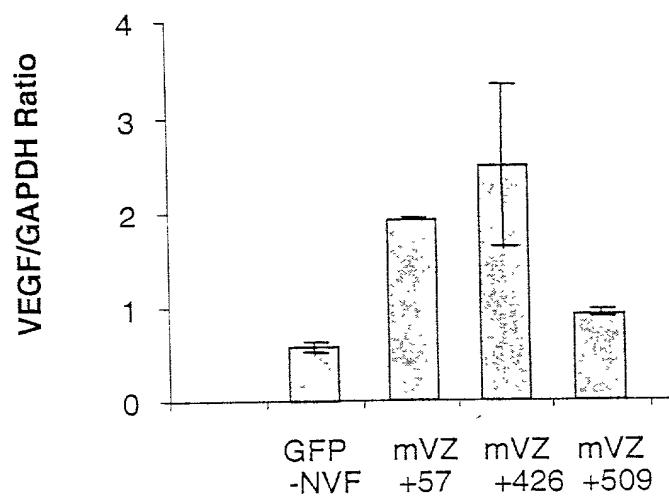
ZFP	Target	Gel Shift	Apparent Kd (nM)
mVZ+57	TGAGCGGGGGCAGCGGAGc	Bound Free	0.031
mVZ+426	GGGGGTGACc	Bound Free	<0.01
mVZ+509	GCTGGGGGCg	Bound Free	<0.01
SP1	GGGGCGGGGg	Bound Free	0.053

Figure 16

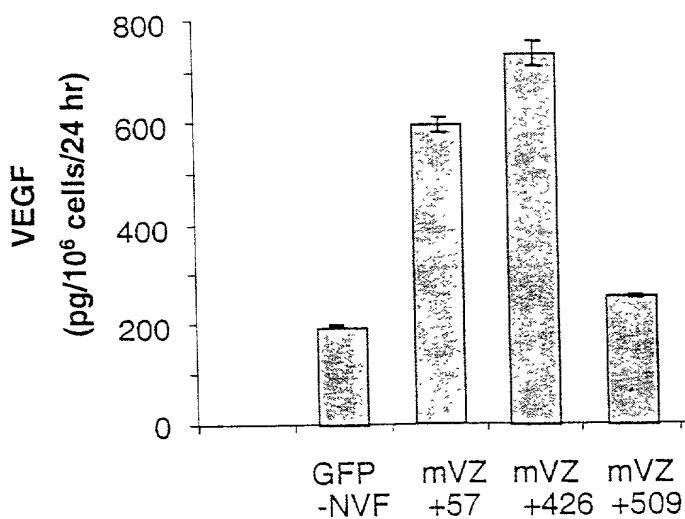
A



B



C



Smooth Muscle Cells Infected With  
Adenovirus Expressing VPO 30A

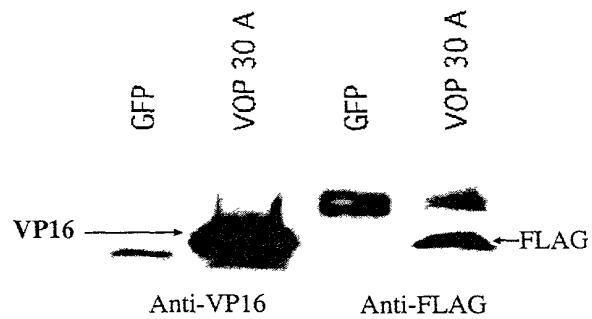


FIG. 17A

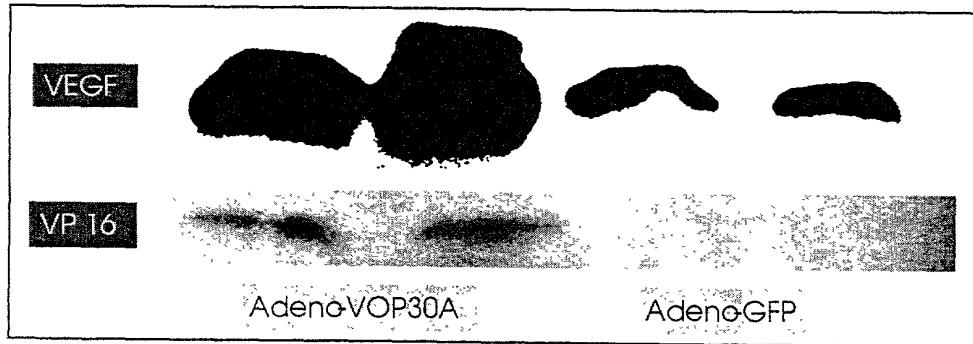


FIG. 17B

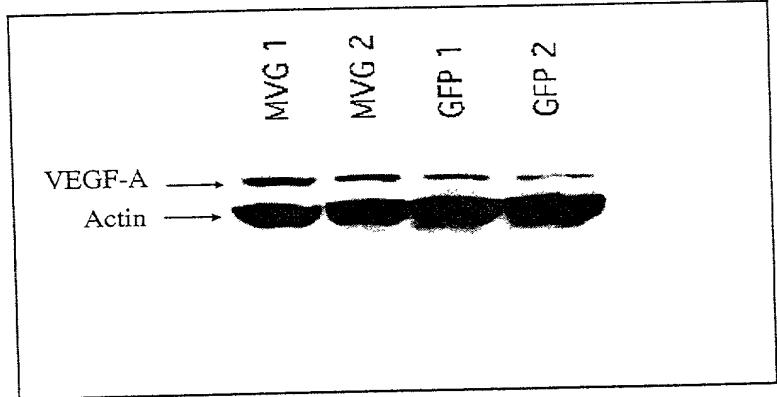


FIG. 17C

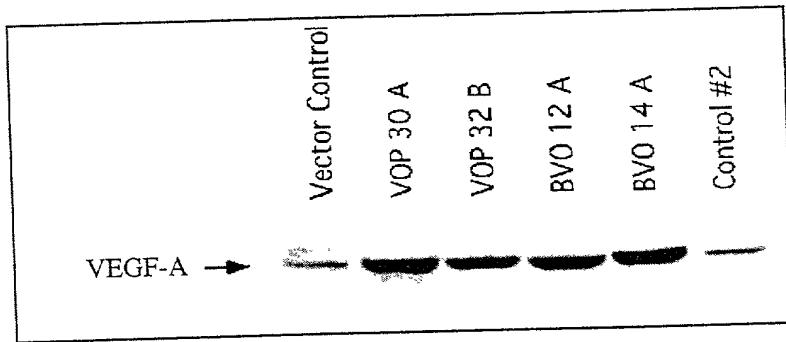


FIG. 17D

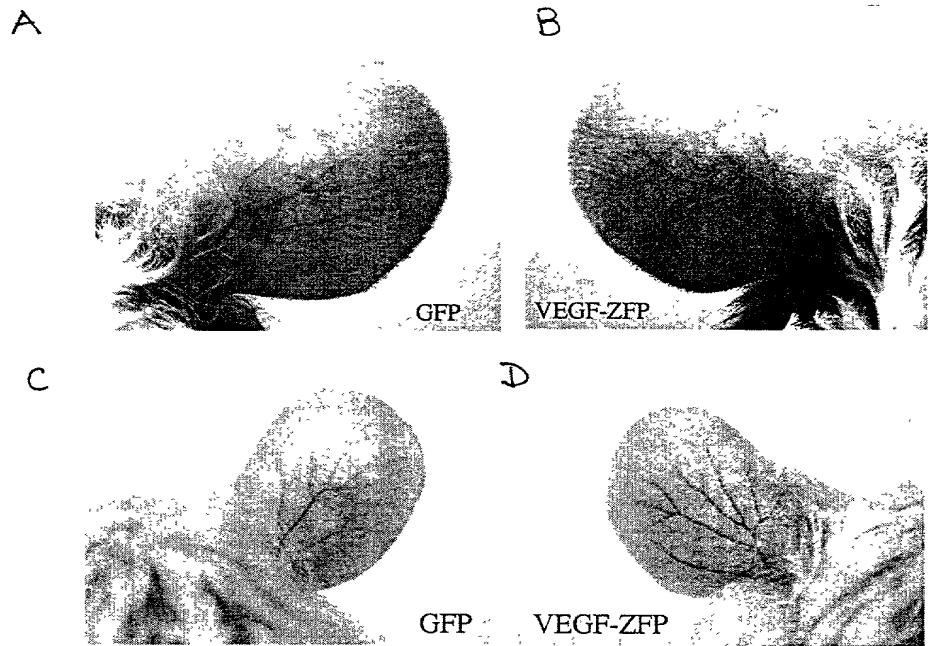


FIG. 18

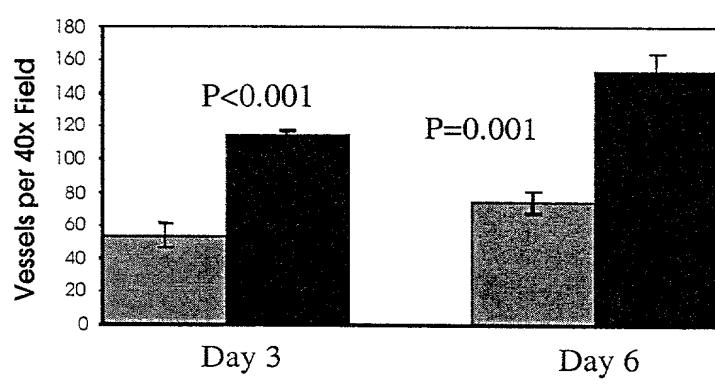


FIG. 18 E

FIG. 19A

GFP

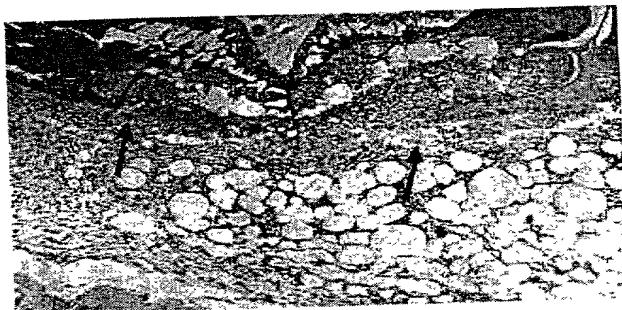


FIG. 19B

MVG

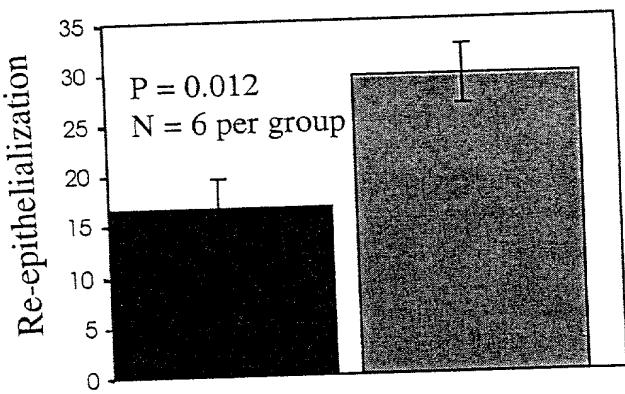
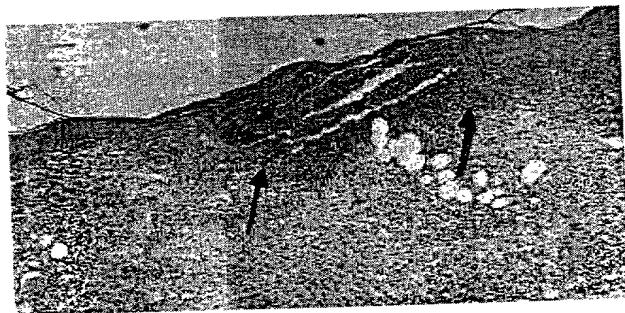
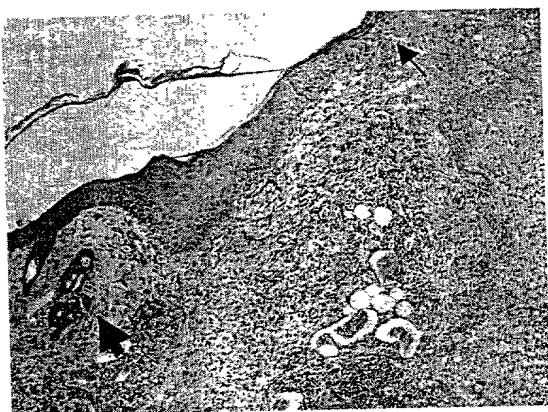


FIG. 19C



VEGF-ZFP (MVG)  
(MVG)

FIG. 20A



GFP Control

FIG. 20B

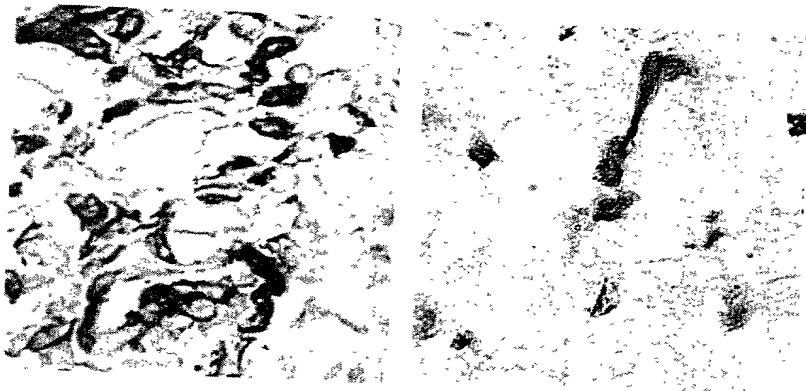


FIG. 21 A

FIG. 21 B

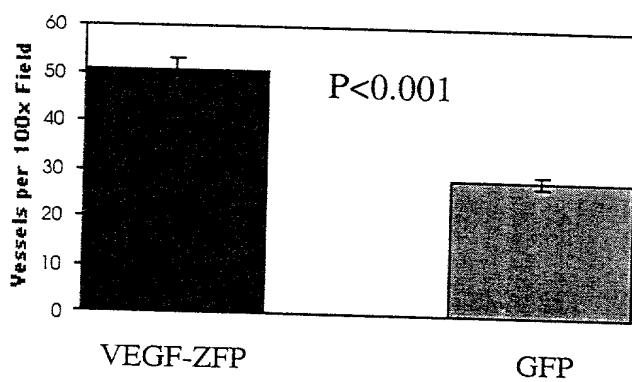


FIG. 21 C